

Accounting for Bonds 101

WASBO Accounting Conference

March 17, 2022 | 9:40-10:30am

Baird Public Finance

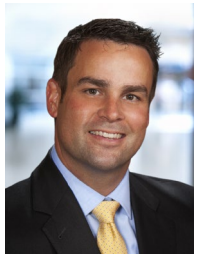
Debby Brunett
Director
715-552-3567
dbrunett@rwbaird.com

Lisa Voisin
Managing Director
414-765-3801
lvoisin@rwbaird.com

Kevin Mullen
Director
414-765-8709
kmullen@rwbaird.com

Discover the *Baird Difference*

Our Team



Brian Brewer
Managing Director
414-298-7030
bbrewer@rwbaird.com



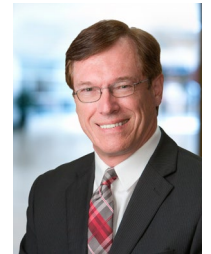
Lisa Voisin
Managing Director
414-765-3801
lvoisin@rwbaird.com



Mike Clark
Director
414-765-7326
mdclark@rwbaird.com



Kevin Mullen
Director
414-765-8709
kmullen@rwbaird.com



Dennis Birr
School Business Specialist
414-298-7030
bbrewer@rwbaird.com



Mary Blaha
School Business Specialist
920-803-4423
mblaha@rwbaird.com



Debby Brunett
School Business Specialist
715-552-3567
dbrunett@rwbaird.com



Todd Hajewski
School Business Specialist
414-298-1974
thajewski@rwbaird.com



Keith Lucius
School Business Specialist
920-634-6999
klucius@rwbaird.com



Elise Murn
School Business Specialist
414-298-2324
emurn@rwbaird.com

School Business Solutions Products & Services



BAIRD BUDGET FORECAST MODEL

Budgeting tools that let you plan proactively

- Comprehensive school finance forecast
- “What-if” scenarios for school budget, levy, referendum planning and more
- Grab-and-go charts and graphs for communications

BAIRD VIDEO LIBRARY

More than 100 interactive school finance videos in an easy-to-grasp format

- Increase your team’s school business knowledge and efficiency
- Toolkits for any board, community, lunch-and-learn or team meeting
- Ideal for training, continuing education and talent development

BAIRD SCHOOL ANALYTICS

Sortable, searchable state and district data – right at your fingertips

- Up-to-date school statistics to help you make data-driven decisions
- Visuals and high-level summaries for board and community presentations
- Tools to identify the factors most closely tied to academic performance in your district

BUSINESS OFFICE TRAINING/CONSULTING

Training and consulting from Baird’s school business experts

- Training, mentoring and stand-in services, on-site or remote
- Auditing, reporting, bank reconciliations and operational referendum
- Board and community presentations

Financial Management

- Referendum planning
- Debt monitoring and analysis
- Capital improvement planning
- Investment alternatives

Debt Issuance Planning

- Financing alternatives
- Market analysis
- Debt structuring options
- Credit rating consultation
- Document and disclosure guidance

Municipal Bond Market Access

- National sales force
- Diverse investors
- Active in all types of fixed income securities
- Dedicated purchaser of cash flow notes

Learning Objectives

AT THE END OF THE PRESENTATION, ATTENDEES WILL:

- Understand municipal market interest rate indicators
 - Economic update
 - Interest rate trends and forecast
 - Interest rate volatility

- Identify where and when to update DPI debt schedules

- Recognize debt transactions and coding guides

Municipal Interest Rate & Economic Update

Bonds and Inflation

What is inflation and why is it bad for interest rates?

- Bond investors receive a fixed interest payment for a stated period of time
- Increases in inflation reduce the value of a dollar received in the future
- Increases in inflation lead to an increase in interest rates

Current inflationary pressure:

- Fiscal stimulus and relief packages related to COVID:
 - Cares Act - \$2.3 trillion
 - American Rescue Plan - \$1.9 trillion
 - Inflation Investment & Jobs Act - \$1.2 trillion
 - Potentially, Build Back Better
- Federal Reserve intervention
 - Increases in fed fund rates
 - Tapering of quantitative easing
- Pressure on consumer prices
 - Supply chain issues
 - Geo-political turmoil



What does this mean for your District?

A 10-basis point change in interest (i.e, 3.00% to 3.10%) on a \$20M, 20-year borrowing will change borrowing costs by approximately **\$250,000**.

Economic Update

- Last week saw an increase in jobless claims at 227k; 11k more than the previous week (3/10)
- The annual inflation rate increased to 7.9% in February, the highest rate since 1982 (3/10)
- US unemployment decreased to 3.8% in February, below market expectations of 3.9% (3/10)
- February saw the US average hourly earnings rise by \$0.02, following increases in previous months (3/10)
- The US economy grew by almost 7% in Q4, well above the expected 5.5% (12/31)

The Federal Reserve

- As the war between Russia and Ukraine continues, and with another increase in inflation to 7.9%, consumer prices for gas, food and other products continue rising (3/3)
- This week, the Fed is expected to raise interest rates by 0.25% to combat increasing inflation. Experts predict up to five rate hikes in 2022 (3/10)

Interest Rate Forecast

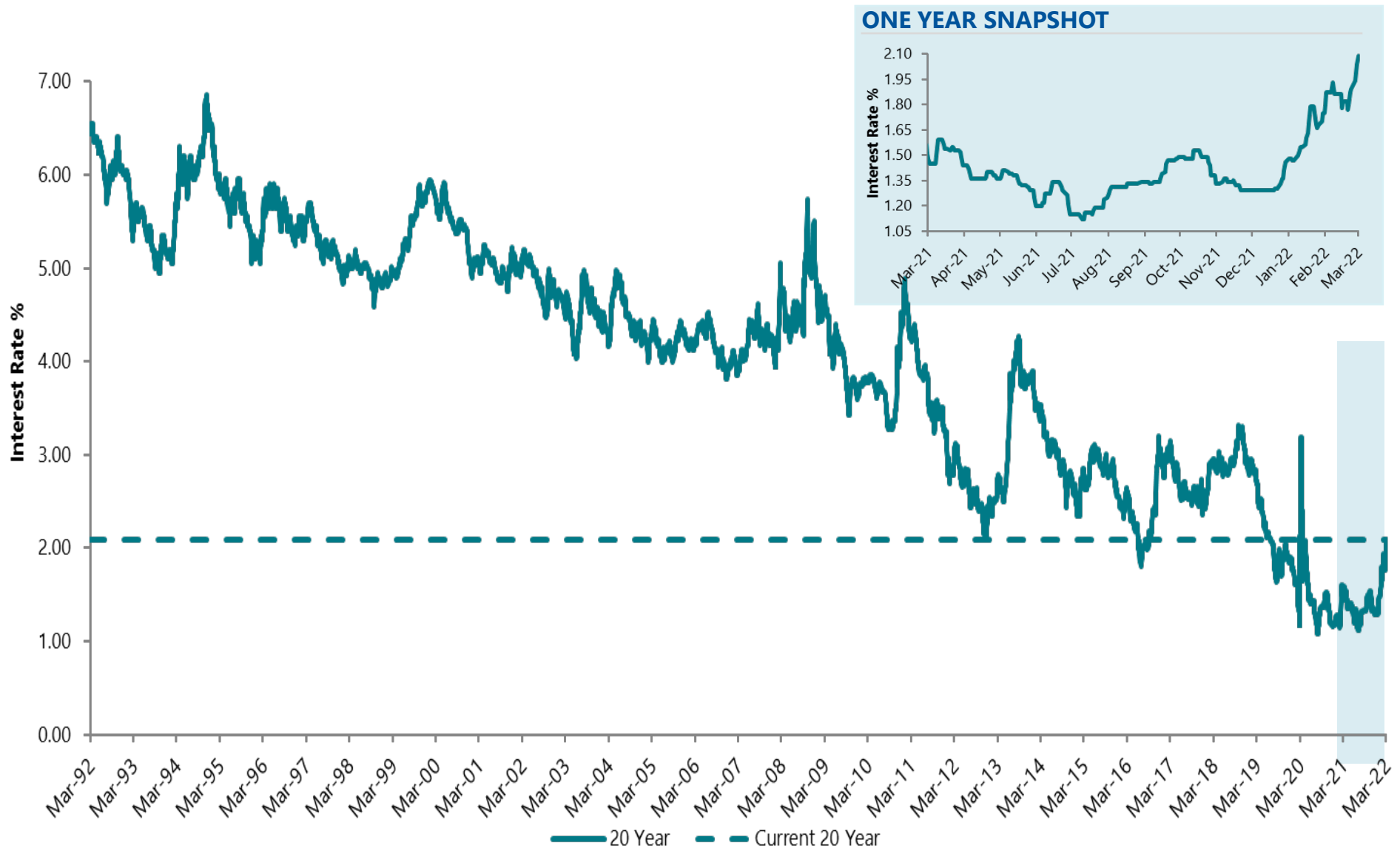
INTEREST RATES IN 2022:

- Federal Reserve announced a doubling of the pace of QE tapering and projection of five rate hikes in 2022.
- Certain tax related items such as adjusting the state and local tax (SALT) deduction could reemerge in a variation of the Build Back Better bill and there exists the potential for raising tax rates to offset spending, which would be expected to bolster the allure of tax-exempt municipal bonds.
- Federal policy changes could alter the tax-exempt interest rate outlook, including changes to tax rates and resumption of tax-exempt advance refundings, which would likely materially increase new issue volumes and lift municipal interest rates.
- Rising treasury rates could act to suppress taxable advance refundings causing total taxable issuance to decline.

	3/10	2022				2023				2024
		Q1*	Q2*	Q3*	Q4*	Q1*	Q2*	Q3*	Q4*	Q1*
Fed Funds Upper	0.25	0.50%	0.95%	1.25%	1.50%	1.75%	1.95%	2.10%	2.20%	2.20%
Fed Funds Lower	0.00	0.25%	0.69%	0.98%	1.24%	1.50%	1.70%	1.84%	1.95%	1.96%
2-Year Treasury	1.72	1.46%	1.63%	1.77%	1.89%	2.04%	2.18%	2.25%	2.32%	2.34%
5 -Year Treasury	1.92	1.74%	1.89%	1.99%	2.08%	2.19%	2.31%	2.35%	2.41%	2.49%
10-Year Treasury	1.98	1.90%	2.07%	2.17%	2.29%	2.36%	2.48%	2.52%	2.58%	2.66%

Tax-Exempt Interest Rates

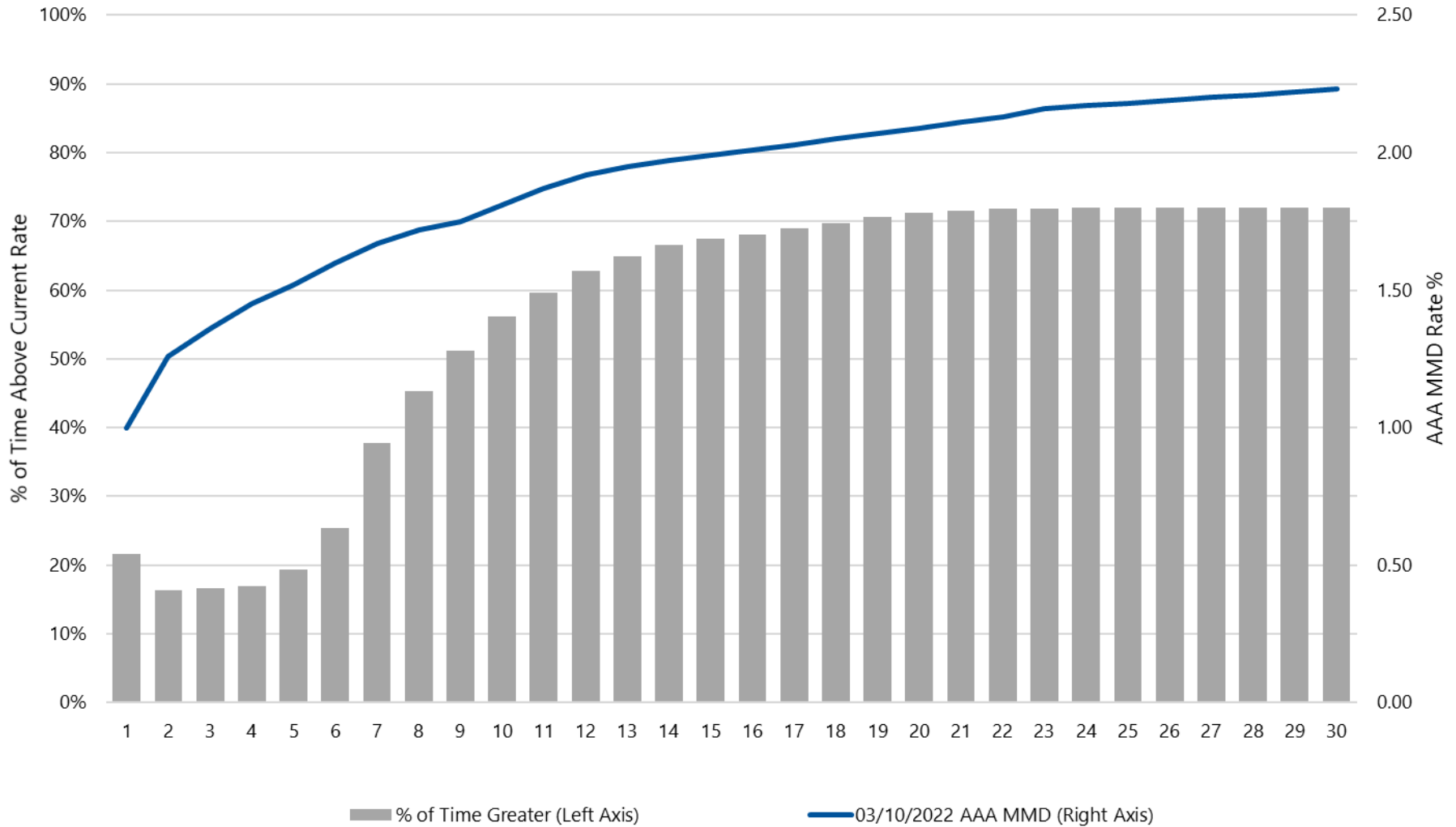
30-YEAR LOOKBACK



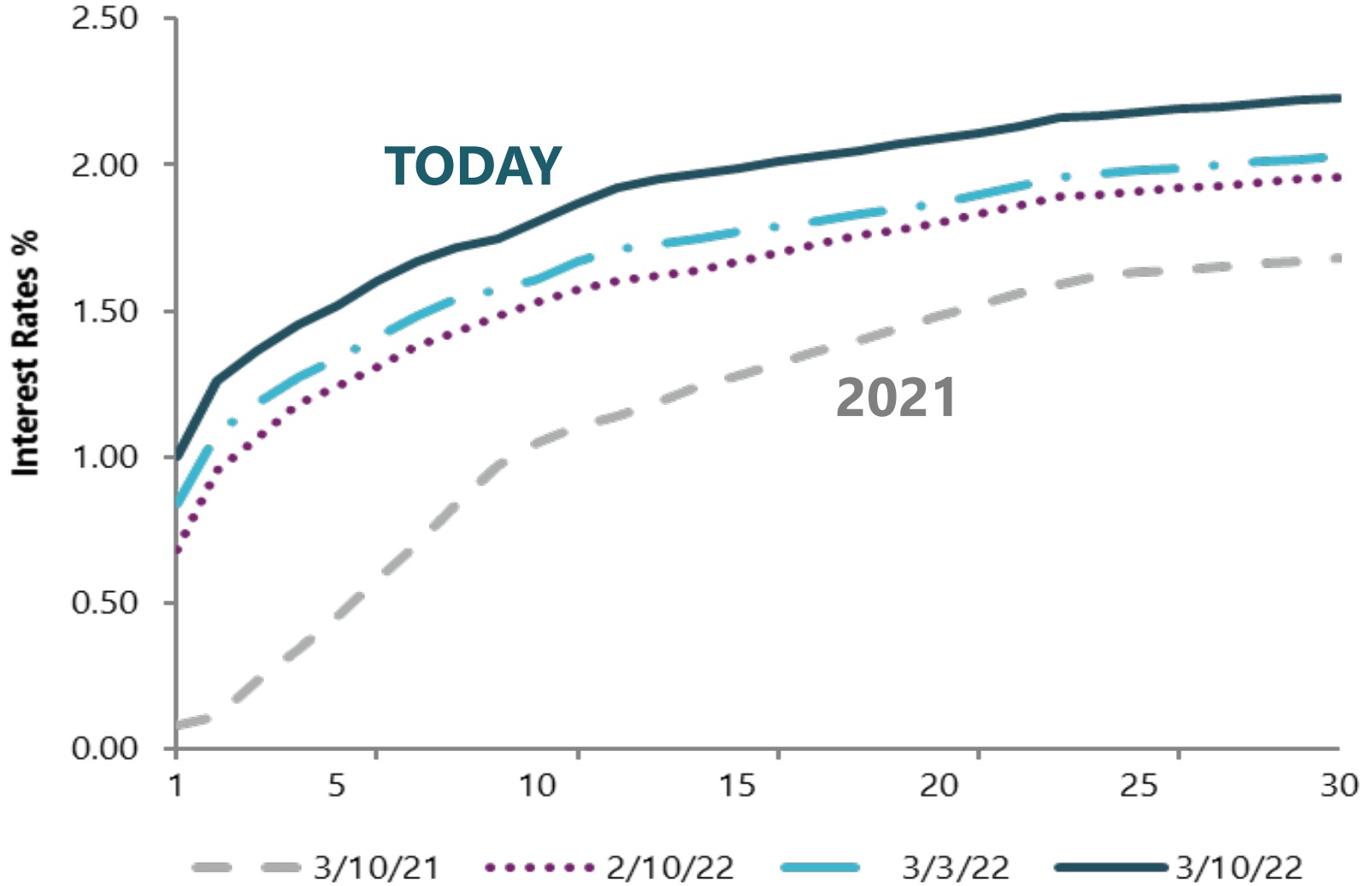
Source: Refinitiv as of March 10, 2022

Percent of Time We Have Been Above Current Rates

10-YEAR LOOKBACK

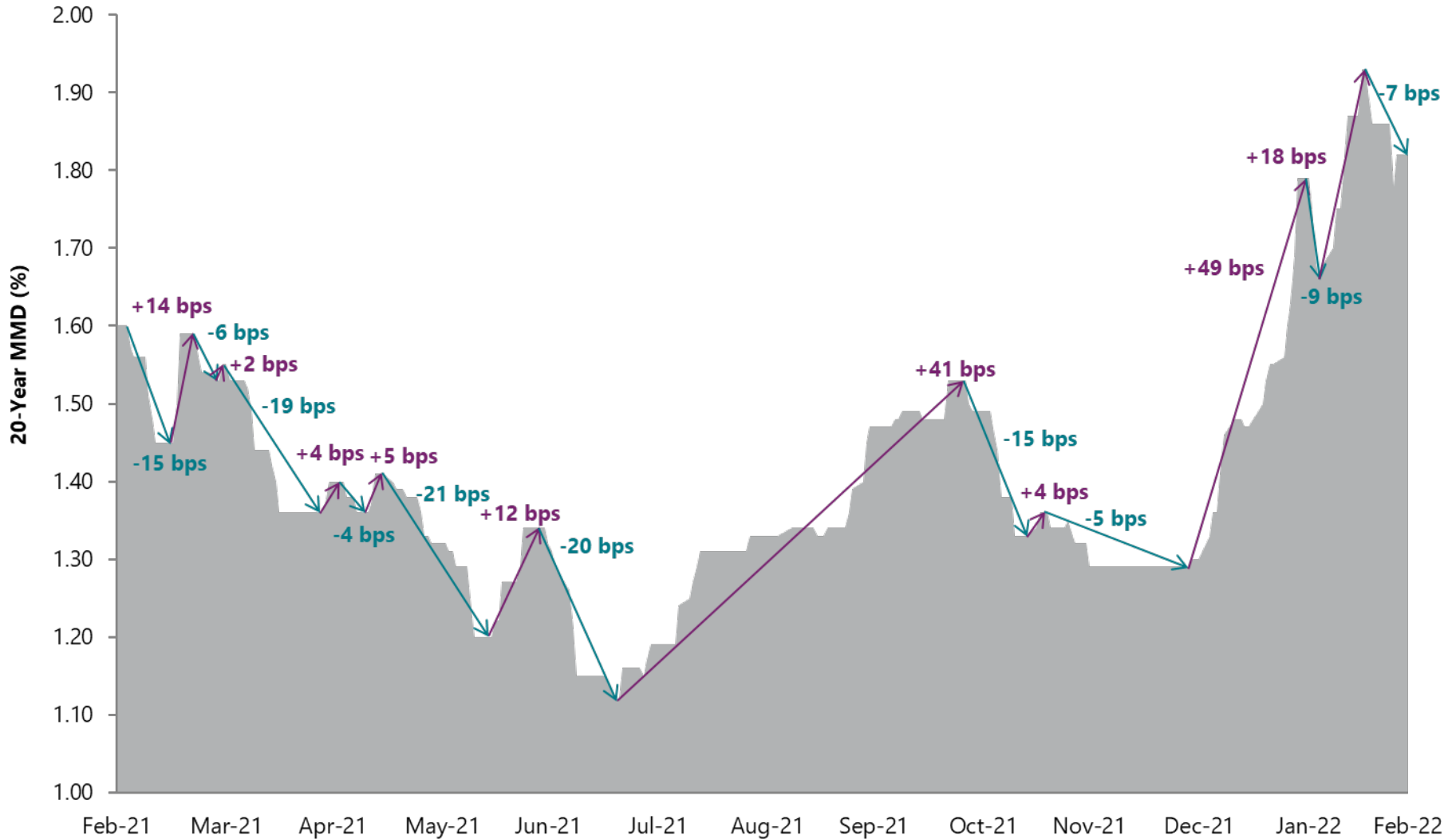


What Does "Flattening Yield Curve" Mean?



Volatility in Tax-Exempt Interest Rates

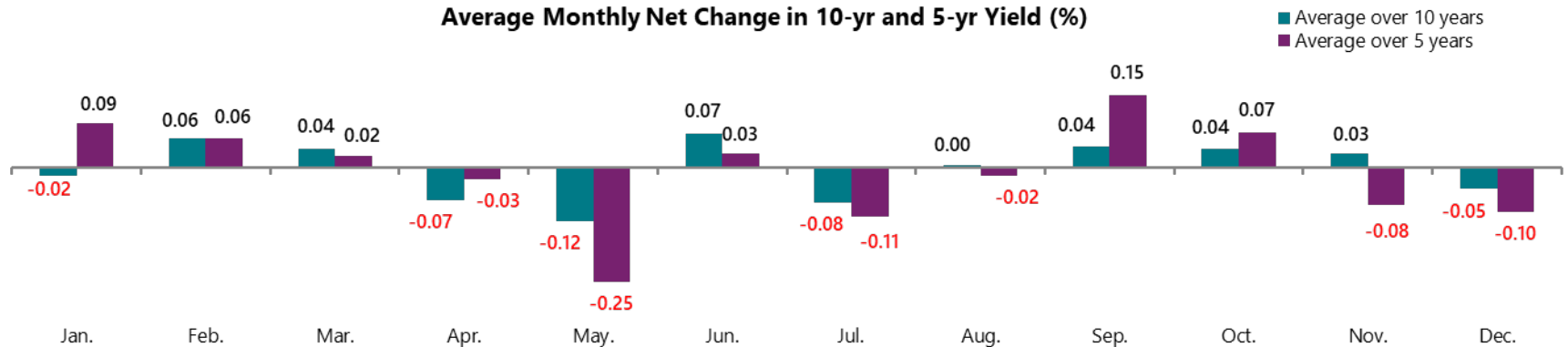
ONE-YEAR SNAPSHOT



Bloomberg Heat Map

	2006-2022											
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2022	0.52	0.03										
2021	0.02	0.42	-0.05	-0.10	0.00	0.03	-0.16	0.09	0.20	0.09	-0.16	-0.01
2020	-0.30	-0.21	0.47	0.00	-0.63	0.04	-0.22	0.17	0.04	0.10	-0.23	-0.03
2019	-0.13	-0.05	-0.25	0.01	-0.24	-0.03	-0.09	-0.27	0.21	0.01	0.01	-0.01
2018	0.36	0.11	-0.01	0.06	-0.10	0.04	0.01	-0.02	0.15	0.14	-0.21	-0.23
2017	-0.04	-0.01	-0.04	-0.10	-0.26	0.06	-0.07	-0.06	0.17	0.03	0.18	-0.20
2016	-0.27	0.02	0.00	-0.10	-0.02	-0.27	0.09	-0.02	0.09	0.23	0.76	-0.16
2015	-0.32	0.33	-0.12	0.13	0.19	0.06	-0.07	-0.09	-0.12	-0.02	0.00	-0.07
2014	-0.02	-0.08	0.03	-0.18	-0.29	-0.07	-0.08	-0.08	0.06	-0.11	0.12	-0.14
2013	-0.01	0.05	0.09	-0.20	0.23	0.80	0.05	0.20	-0.36	-0.07	0.05	0.12
2012	-0.14	0.02	0.28	-0.22	-0.03	0.06	-0.21	0.12	0.00	-0.01	-0.22	0.26
2011	0.10	-0.30	0.08	-0.15	-0.39	-0.11	0.24	-0.57	-0.12	0.44	-0.21	-0.37
2010	-0.02	-0.16	0.19	-0.13	-0.10	0.05	-0.33	-0.43	0.18	0.17	0.42	0.34
2009	-0.64	0.04	0.17	-0.29	-0.01	0.34	-0.20	-0.08	-0.31	0.41	-0.19	0.11
2008	-0.38	0.46	-0.03	0.01	-0.03	0.23	-0.13	-0.15	0.43	0.33	-0.28	-0.29
2007	0.13	-0.19	0.06	0.04	0.09	0.22	-0.12	0.03	-0.20	-0.04	-0.08	0.01
2006	0.00	0.02	0.19	0.13	-0.08	0.17	-0.19	-0.17	-0.11	0.03	-0.12	0.11

Average Monthly Net Change in 10-yr and 5-yr Yield (%)



Business Office Nuts and Bolts

Entering Debt into the Debt Portal



Within 10 days,
enter in the DPI
SAFR Debt Portal

Long-Term Debt Issues - All Debt								
Name	Debt Type ^A _Z ↓	Fund	Function	Issue Date	Maturity Date	Original Amount	Current Balance	Payment Schedule
	Bond Issue	39	281	03/01/1998	09/01/2012	\$1,340,000.00	\$0.00	View
WRS REFINANCING	Bond Issue	38	281	08/01/2003	03/01/2017	\$460,000.00	\$0.00	View
9,950,000 GO SCHOOL BUILDING BONDS	Bond Issue	39	281	03/04/2008	09/01/2028	\$9,950,000.00	\$0.00	View
\$5,650,000 General Obligation Refunding Bonds, Series 2016	Bond Issue	39	281	04/13/2016	09/01/2026	\$5,650,000.00	\$2,670,000.00	View
POOL RENOVATION	Note	38	281	03/03/2021	12/01/2030	\$585,325.15	\$555,418.99	View
PHASE II 2008	State Trust Fund Loan	39	281	08/26/2009	03/15/2024	\$1,050,000.00	\$0.00	View

Add New Issue

New

Edit

Edit

File Path: [SFS Homepage](https://dpi.wi.gov/sfs) (dpi.wi.gov/sfs) / SAFR Reporting Portals / Log In to View or Submit Data / <log in> / Financial Data Home / Debt Schedules (PI-1505-DEBT)



[Baird Video Library Video – Entering Debt into the Debt Portal](#)

Entering Debt into the Debt Portal



The portal detail determines how to code annual expenditures

Name	Debt Type <small>A Z ↓</small>	Fund	Function
General Obligation Refunding Bonds	Bond Issue	39	281
Taxable Gene Obligation Refunding Bo			

670	Principal
673	Long-Term Note Principal
674	State Trust Fund Loan Principal
675	Long-Term Bond Principal
676	TEACH Loan Principal
677	Land Contract Principal
678	Capital Lease Principal
680	Interest
682	Temporary Note Interest
683	Long-Term Note Interest
684	State Trust Fund Loan Interest
685	Long-Term Bond Interest
686	TEACH Loan interest
687	Land Contract Interest
688	Capital Lease Interest

Correctly Coded:

39 E 800 675 281000 000
39 E 800 685 281000 000

Coding Debt Transactions – Initial Borrowing

DPI Coding Guide



**Debt Proceeds
Fund 49**



**Debt Repayment
Fund 38 or 39**

Journal Entries for Debt Issuance and Subsequent Interest and Principal Payments
 Below are the anticipated journal entries to record the various debt issuance by a school district.
 Also included below are the debt anticipated journal entries to record the debt interest and principal payments.
 Debt is recorded in Fund 38 if non-referendum related or in Fund 39 if referendum related.

General Obligation Bonds			
To Record Bond Issuance			
Dr. 49 B 000 000 711000 000	Cash	-	
Cr. 49 R 000 875 500000 000	Long-Term Bond Proceeds	-	JE IN BALANCE
To Record Bond Premium, if applicable			
Dr. 38/39 B 000 000 711000 000	Cash	-	
Dr. 38/39 E 000 690 281000 000	Other Debt Payment-Closing Costs	-	
Dr. 38/39 E 000 690 281000 000	Other Debt Payment-Discount	-	
Cr. 38/39 R 000 968 500000 000	Debt Premium-Non-Refinancing Debt	-	JE IN BALANCE
Debt Service Interest and Principal Payments			
Dr. 38/39 E 000 675 281000 000	Long-Term Bond Principal	-	
Dr. 38/39 E 000 685 281000 000	Long-Term Bond Interest	-	
Cr. 38/39 B 000 000 711000 000	Cash	-	JE IN BALANCE
General Obligation Notes			
To Record Note Issuance			
Dr. 49 B 000 000 711000 000	Cash	-	
Cr. 49 R 000 873 500000 000	Long-Term Notes Proceeds	-	JE IN BALANCE
To Record Note Premium, if applicable			
Dr. 38/39 B 000 000 711000 000	Cash	-	
Dr. 38/39 E 000 690 281000 000	Other Debt Payment-Closing Costs	-	
Dr. 38/39 E 000 690 281000 000	Other Debt Payment-Discount	-	
Cr. 38/39 R 000 968 500000 000	Debt Premium-Non-Refinancing Debt	-	JE IN BALANCE
Debt Service Payments			
Dr. 38/39 E 000 673 281000 000	Long-Term Notes Principal	-	



[Baird Video Library Video – Coding Debt Issues](#)

Coding Debt Transactions – Defeasance / Prepayment

DPI Coding Guide

Journal Entries for Debt Issuance and Subsequent Interest and Principal Payments			
Below is the anticipated journal entry to record the defeasance of debt by a school district. Defeasance uses levied cash on hand to make prepayment of debt principal and interest. It removes a portion of the remaining debt as a legal liability of the District once the escrow closes.			
Debt is recorded in Fund 38 if non-referendum related or in Fund 39 if referendum related.			
Bond Defeasance			
Dr. 38/39 E 000 675 281000 000	Long-Term Bond Principal	-	
Dr. 38/39 E 000 685 281000 000	Long-Term Bond Interest	-	
Dr. 38/39 E 000 690 281000 000	Other Debt Retirement-Closing Costs	-	
Cr. 38/39 R 000 968 500000 000	Debt Premium-Non-Refinancing Debt		-
Cr. 38/39 B 000 000 711000 000	Cash		-
		-	-
			JE IN BALANCE
Debt Schedule Adjustments			
The principal payment defeased should be included in the "Principal Payments Scheduled" column in SAFR debt schedule.			
The interest payment defeased should be included in the "Interest Payments Scheduled" column in SAFR debt schedule.			
Remember to adjust future payments per the new debt schedule provided during defeasance.			
Debt schedule should equal 0 at end.			



Baird Video Library Video – Coding Debt Issues

Coding Debt Transactions – Refinancing

DPI Coding Guide

Journal Entries for Refinancing of Debt and Subsequent Principal and Interest Payments

Below are the anticipated journal entries to record various debt refinancing transactions by a school district and subsequent debt service payments. Debt is recorded in Fund 38 if non-referendum related or in Fund 39 if referendum related.

SEE EXAMPLES OF REFINANCING TRANSACTIONS AND CORRESPONDING CLOSING MEMOS AT <https://dpi.wi.gov/sfs/finances/wufar/accounting-issues-examples>

General Obligation Bond Refinancing Transaction			
New Bond Issuance			
	Cash	-	
Dr. 38/39 E 000 690 282000 000	Other Debt Retirement-Closing Costs	-	
Dr. 38/39 E 000 690 282000 000	Other Debt Retirement-Discount	-	
Cr. 38/39 R 000 875 500000 000	Long-Term Bond Proceeds		-
Cr. 38/39 R 000 879 500000 000	Premium on Debt Refinancing		-
		-	-
			JE IN BALANCE
Payoff of Refinanced Bond			
Dr. 38/39 E 000 675 282000 000	Long-Term Bond Principal	-	
Dr. 38/39 E 000 685 282000 000	Long-Term Bond Interest	-	
Cr. 38/39 B 000 000 711000 000	Cash		-
		-	-
			JE IN BALANCE
Totals			
		-	-
			JE IN BALANCE
Function 282000 Test:			
Proceeds		-	
Plus Premium		-	
Less Principal Paid Off		-	
Less Interest Paid Off		-	
Less Discount		-	
Less Fees		-	
Must Equal Zero or Cash Received		-	TEST WORKS

If principal and interest payments occur in the same fiscal year as the refinancing, the cash received as calculated above must be applied to principal or interest payments for this issue using Function 282000. See "Debt Service Payments on New GO Bond Issuance" with cash received from refinancing included in example. If no principal and interest payments occur in the same fiscal year as the refinancing, the cash received as calculated above must be coded to Fund Balance Restricted for Refinancing – 936310 at year end.

In the subsequent fiscal year, the balance in 936310 must be applied to principal or interest payments as a 282000 function. For example, if the total interest payments are \$50,000 but a balance of \$5,000 was remaining in 936310, \$45,000 would be coded to Function 281000 and \$5,000 would be coded to Function 282000.



Coding Debt Transactions – Refinancing

DPI Coding Guide

Debt Service Payments on New GO Bond Issuance					
Dr. 38/39 E 000 675 281000 000	Long-Term Bond Principal	-			
Dr. 38/39 E 000 685 281000 000	Long-Term Bond Interest	-			
Dr. 38/39 E 000 685 282000 000	Long-Term Bond Interest	-			
Cr. 38/39 B 000 000 711000 000	Cash	-			
		-	-	JE IN BALANCE	

The district needs to enter a new debt schedule for the new debt issued. See "Enter LT Debt in SAFR Tab".

Below is an example of the first line including the coding for cash received during refinancing.

Period	Last Principal Balance	Principal Payments Scheduled	Interest Payments Scheduled	Refinanced Principal Adjustment	Refinanced Interest Adjustment	New Principal Balance
PERIOD IN WHICH REFINANCING OCCURS	0.00	0.00	0.00	0.00	0.00	0.00

The Bond debt schedule you are refinancing should be adjusted to look like the below:

Period	Last Principal Balance	Principal Payments Scheduled	Interest Payments Scheduled	Refinanced Principal Adjustment	Refinanced Interest Adjustment	New Principal Balance
PERIOD IN WHICH REFINANCING OCCURS	0.00	0.00	0.00	0.00	0.00	0.00



[Baird Video Library Video – Coding Debt Issues](#)

DPI and Baird Resources to support transaction entry



Debt Proceeds
Fund 49

Revenue = Debt Proceeds (+ others)
Expenditures = Project Costs



Debt Repayment
Fund 38 or 39

Revenue = Tax Levy (+ others)
Expenditures = Debt Payments

Questions?



Important Disclosures

Robert W. Baird & Co. Incorporated is providing this information to you for discussion purposes only. The information does not contemplate or relate to a future issuance of municipal securities. Baird is not recommending that you take any action, and this information is not intended to be regarded as "advice" within the meaning of Section 15B of the Securities Exchange Act of 1934 or the rules thereunder. In providing this information, Baird is not acting as an advisor to you and does not owe you a fiduciary duty pursuant to Section 15B of the Securities Exchange Act of 1934. You should discuss the information contained herein with any and all internal or external advisors and experts you deem appropriate before acting on the information.